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# NOTICE OF ALLOWANCE AND FEE(S) DUE

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02/10/2011

BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610 EXAMINER

CHEN, XIAOLIANG

ART UNIT PAPER NUMBER

2835

DATE MAILED: 02/10/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,556	08/04/2006	Josef Deuringer 1	1371/125(2003P17082WOUS	8277

TITLE OF INVENTION: HOUSING COMPRISING A LIQUID-TIGHT ELECTRIC BUSHING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/10/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 (571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 757 7590 02/10/2011 Certificate of Mailing or Transmission BRINKS HOFER GILSON & LIONE I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. P.O. BOX 10395 CHICAGO, IL 60610 (Depositor's name (Signature (Date APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR 10/588.556 08/04/2006 11371/125(2003P17082WOUS) 8277 Josef Deuringer TITLE OF INVENTION: HOUSING COMPRISING A LIQUID-TIGHT ELECTRIC BUSHING APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$0 \$1810 05/10/2011 **EXAMINER** ART UNIT CLASS-SUBCLASS CHEN, XIAOLIANG 2835 361-752000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: ☐ Issue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_ (enclose an extra copy of this fo Advance Order - # of Copies \_ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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10/588,556	08/04/2006	Josef Deuringer 1	1371/125(2003P17082WOU	S) 8277
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BRINKS HOFER GILSON & LIONE			CHEN, XIAOLIANG	
P.O. BOX 10395			ART UNIT	PAPER NUMBER
CHICAGO, IL 60610			2835	
			DATE MAILED: 02/10/201	1

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 550 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 550 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)		
	10/588,556	DEURINGER ET AL.		
Notice of Allowability	Examiner	Art Unit		
	XIAOLIANG CHEN	2835		
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commu GHTS. This application is s	this application. If not included inication will be mailed in due course. <b>THIS</b>		
1. This communication is responsive to <u>01-31-11</u> .				
2. X The allowed claim(s) is/are 1,5,7-11,15,19 and 21-25.				
<ul> <li>3. Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: <ol> <li>Certified copies of the priority documents have</li> <li>Certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Applicant has THREE MONTHS FROM THE "MAILING DATE"</li> </ol> </li> </ul>	been received. been received in Applicatio cuments have been received	n No I in this national stage application from the		
noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	itted. Note the attached EXA			
<ul> <li>5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted. <ul> <li>(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1)  hereto or 2)  to Paper No./Mail Date</li> <li>(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> </ul> </li> <li>6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul>				
Attachment(s)  1. Notice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)  3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material  /Xiaoliang Chen/ Primary Examiner, Art Unit 2835	6. ☐ Interview Su Paper No./I 7. ☐ Examiner's	formal Patent Application  Jummary (PTO-413),  Mail Date  Amendment/Comment  Statement of Reasons for Allowance		

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## **DETAILED ACTION**

### **Amendment**

- 1. Acknowledgement is made of Amendment filed 01-31-11.
- 2. Claims 1 and 15 are amended.
- 3. Claims 2-4, 6, 12-14, 16-18, 20 and 26-28 are canceled.

## Allowable Subject Matter

- 4. Claims 1, 5, 7-11, 15, 19 and 21-25 are allowed.
- 5. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1, 5 and 7-11 are allowable because the prior art of record neither anticipates nor renders obvious the limitations of the base claim 1 in combination as claimed, including:

an opening in the housing of an X-ray tube, wherein a coolant oil is circulated through the housing at an overpressure to cool the X-ray tube during operation thereof; a printed circuit board mounted to the housing and having at least first and second layers, the at least first and second layers being configured without a continuous opening such that the printed circuit board is a liquid-tight closure that prevents the coolant oil from flowing outside of the housing; a seal disposed around the opening in the housing and between the printed circuit board and the housing; a pressure plate that contacts an underside of the printed

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circuit board and is mounted on the housing such that the pressure plate presses the first layer of the printed circuit board against the seal around the opening in the housing such that the first layer of the printed circuit board forms the liquid tight closure.

Claims 15, 19 and 21-25 are allowable because the prior art of record neither anticipates nor renders obvious the limitations of the base claim 15 in combination as claimed, including:

disposing a seal around the opening in the housing and between the printed circuit board and the housing, disposing a pressure plate that contacts an underside of the printed circuit board to press the printed circuit board against the seal around the opening in the housing, mounting the printed circuit board comprising a first layer on the housing of an X-ray tube, wherein a coolant oil is circulated through the housing at an overpressure to cool the X- ray tube during operation thereof, the printed circuit board having no continuous opening such that the printed circuit board is a liquid-tight closure that prevents the coolant oil from flowing to the outside of the housing, wherein the first layer spans the opening, and mounting the pressure plate on the housing such that the pressure plate presses the first layer of the printed circuit board against the seal around the opening such that the first layer of the printed circuit board forms the liquid-tight closure.

After carefully review the specification and the claims in the application and art search, considering what is claimed as a whole that the aforementioned

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limitations are believed to render said claims 1, 15 and all claims dependent thereof patentable over art of record.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAOLIANG CHEN whose telephone number is (571)272-9079. The examiner can normally be reached on 8:00-5:00 (EST), Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinhee Lee can be reached on 571-272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Xiaoliang Chen Primary Examiner Art Unit 2835

/Xiaoliang Chen/ Primary Examiner, Art Unit 2835